

WE CLAIM:

1. An isolated nucleic acid molecule which encodes a cytokine receptor, wherein the complementary nucleotide sequence of said isolated nucleic acid molecule, hybridizes, under stringent conditions, to SEQ ID NO: 7 or SEQ ID NO: 9.
2. The isolated nucleic acid molecule of claim 1, wherein said isolated nucleic acid molecule encodes a protein, the amino acid sequence of which is set forth in SEQ ID NO: 8 or SEQ ID NO: 10.
3. The isolated nucleic acid molecule of claim 1, comprising the nucleotide sequence set forth at SEQ ID NO: 7 or SEQ ID NO: 9.
4. Expression vector comprising the isolated nucleic acid molecule of claim 1, operably linked to a promoter.
5. Expression vector comprising the isolated nucleic acid molecule of claim 2, operably linked to a promoter.
6. Expression vector comprising the isolated nucleic acid molecule of claim 3, operably linked to a promoter.
7. Recombinant cell line or cell strain, transformed or transfected with the isolated nucleic acid molecule of claim 1.
8. Recombinant cell line or cell strain, transformed or transfected with the isolated nucleic acid molecule of claim 2.
9. Recombinant cell line or cell strain, transformed or transfected with the isolated nucleic acid molecule of claim 3.
10. Recombinant cell line or cell strain, transformed or transfected with the expression vector of claim 4.
11. Recombinant cell line or cell strain, transformed or transfected with the expression vector of claim 5.
12. Recombinant cell line or cell strain, transformed or transfected with the expression vector of claim 6.
13. An isolated protein encoded by the isolated nucleic acid molecule of claim 1.
14. The isolated protein of claim 13, wherein said protein is soluble.

15. The isolated protein of claim 13, having the amino acid sequence set forth in SEQ ID NO: 8 or 10.

16. The isolated protein of claim 14, having the amino acid sequence set forth in SEQ ID NO: 10.

17. The isolated protein of claim 13, further comprising a detectable label.

18. The isolated protein of claim 14, wherein said protein is an antagonist for AK155.

19. Isolated antibody which specifically binds to the protein of claim 13.

20. The antibody of claim 19, wherein said antibody is monoclonal antibody.

21. Hybridoma cell line which produces the monoclonal antibody of claim 20.

22. A method for inhibiting effect of AK155 on a cell, comprising contacting said AK155 with the protein of claim 13 in an amount sufficient to bind to and antagonize said AK155.

23. A method for determining if AK155 is present in a sample, comprising contacting said sample with the protein of claim 13, and determining binding of said protein to AK155 as a determination of AK155 in said sample.

24. A method for producing a cytokine receptor comprising transforming or transfecting a cell with the isolated nucleic acid molecule of claim 1, culturing the thus transformed or transfected cell in culture medium to produce said cytokine receptor, and isolating it from said cell or culture medium.

25. A method for producing a cytokine receptor, comprising transforming or transfecting a cell with the expression vector of claim 4, culturing the thus transformed or transfected cell in culture medium to produce said soluble cytokine receptor, and isolating it from said cell or culture medium.

26. A method for determining presence of a protein which binds to AK155, comprising contacting said sample with the antibody of claim 19, and determining binding of said antibody to said protein as a determination of presence of said another which binds AK155 in said sample.

27. The method of claim 26, wherein said antibody is labeled with a detectable label.

28. A method for determining expression of a nucleic acid molecule which encodes a protein antagonist of AK155 binding protein in a sample, comprising contacting said sample with an oligonucleotide which hybridizes specifically, under stringent conditions to the nucleotide sequence of SEQ ID NO: 7 or SEQ ID NO: 9, hybridization thereto being indicative of expression of said nucleic acid molecule.
29. An isolated oligonucleotide consisting of from 17 to 100 contiguous nucleotides of SEQ ID NO: 7 or SEQ ID NO: 9.
30. An isolated protein which binds to AK155, produced by the method of claim 24.
31. An isolated protein which binds to AK155, produced by the method of claim 25.
32. A method for inhibiting binding of AK155 to a binding partner, comprising adding an amount of the protein of claim 14 to a sample containing AK155 and a binding partner therefor, sufficient to inhibit said binding.
33. A method according to claim 32 that takes place *in vitro*.
34. A method according to claim 31 or claim 32, further comprising testing or confirming ability of the protein to bind AK155.
35. A method of obtaining an antibody molecule specific for the protein of claim 13 or 14, the method comprising bringing a population or panel of antibody molecules of diverse binding specificity into contact with the cytokine receptor or an antigenic fragment thereof, selecting one or more antibody molecules that bind the protein, and testing said antibody molecules for binding specificity for the cytokine receptor, whereby an antibody molecule specific for the cytokine receptor is obtained.
36. A method according to claim 35 further comprising testing the antibody molecule for ability to inhibit binding of Class II cytokine receptor to AK155.
37. A method for identifying an agent which modulates binding of AK155 to LICR-2, comprising combining AK155 and LICR-2 or a fragment of LICR-2 which binds to AK155, together with said agent, measuring interaction between AK155 and LICR-2 or binding fragment thereof, and comprising measured interaction to interaction between AK155 and LICR-2 or binding fragment thereof in absence of

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said agent, differences therebetween being indicative of said agent being a modulator of binding between AK155 and LICR-2.